Serial No. 10/074,384   Filing Date: February 12, 2002
Reply to Office Action Mailed on March 15, 2005

1. – 37. (Canceled)

38.   (Withdrawn) In a computer comprising a display, a method for displaying data element indicia representative of a plurality of data elements that are interrelated by a plurality of relationships, the method comprising:

selecting a focus data element;

retrieving a set of data elements that are related to the focus data element, wherein each of a plurality of data elements included in the set are associated with one of a plurality of corresponding data types;

generating a focus region to be displayed in a display, wherein the focus region includes representation of the focus data element;

generating a plurality of regions to be displayed in the display, wherein each of the regions is indicative of one of the data types represented in the set of data elements; and

associating a representation of each of the data elements with one of the corresponding regions based on equivalency of one of the data types.

39.   (Withdrawn) The method of claim 38, further comprising identifying for display relationships between the data elements that are represented in different regions.

40.   (Withdrawn) The method of claim 39, wherein identifying for display relationships between the data elements comprises generating for display lines to connect the data elements to represent the relationships.

41.   (Withdrawn) The method of claim 38, wherein retrieving a set of data elements comprises scanning the set of data elements to determine the data types that are represented within the set of data elements.

42.   (Withdrawn) The method of claim 38, wherein retrieving a set of data elements comprises retrieving from a database a list of data elements that are related to the focus data element.

Serial No. 10/074,384   Filing Date: February 12, 2002
Reply to Office Action Mailed on March 15, 2005

43.   (Withdrawn) The method of claim 38, wherein retrieving a set of data elements comprises retrieving a displayable graphical representation of each of the data elements in the set of data elements from a database.

44.   (Withdrawn) The method of claim 43, wherein retrieving a displayable graphical representation of each of the data elements in the set comprises creating a displayable graphical representation of a data element when a displayable graphical representation of the data element does not exist in the database.

45.   (Withdrawn) The method of claim 38, wherein retrieving a set of data elements comprises retrieving a title for each of the data elements from a database.

46.   (Withdrawn) The method of claim 38, wherein retrieving a set of data elements comprises determining the regions based on the data types that are represented within the set of data elements.

47.   (Withdrawn) The method of claim 38, wherein generating a plurality of regions comprises identifying each of the regions as representative of a different data type.

48.   (Currently Amended) In a computer comprising a display, a method for displaying data element indicia representative of a plurality of data elements that are interrelated by a plurality of relationships, the method comprising:

displaying on the display a plurality of visibly separated regions, wherein each of the regions are is defined by region indicia and is representative of a different one of a plurality of corresponding data types that are interrelated within a predefined subject area, wherein each of the data types is a descriptive category that is displayed in one of the regions;

categorizing a plurality of unassociated data elements to be included in the regions based on one of thea data types being associated with each of the data elements, wherein categorization is based on the descriptive category that describes the content or subject matter of the data elements;

Page 3 of 21

displaying on the display a plurality of data element indicia positioned in the regions, wherein each indicium of the data element indicia is representative of a data element that is categorized to be displayed in the corresponding region; and

displaying on the display a relationship only between ~~indicium of the~~ data element indicia positioned in different regions.

49.   (Previously Presented) The method of claim 48, wherein displaying on the display a plurality of regions comprises displaying on the display an indication of the data type of each of the corresponding regions.

50.   (Currently Amended) The method of claim 48, wherein displaying on the display a relationship between data element indicia~~um~~ comprises indicating on the display a confirmed relationship between a plurality of related data elements.

51.   (Currently Amended) The method of claim 48, wherein displaying on the display a relationship between data element indicia~~um~~ comprises indicating on the display a relationship between a plurality of potentially related data elements.

52.   (Currently Amended) The method of claim 51, wherein indicating on the display a relationship between potentially related data elements comprises:

receiving an indication confirming an unverified relationship between indicia representative of wholly unique, otherwise unassociated data elements ~~potential relationship between potentially related data elements~~; and

converting the unverified relationship to a relationship representative of a confirmed relationship.

53.   (Currently Amended) The method of claim 48, wherein displaying on the display a relationship between data element indicia~~um~~ comprises, displaying on the display verified relationships only between indicia~~um~~ in different regions with a first relationship indicia and displaying on the display unverified relationships only between indicia~~um~~ in

Serial No. 10/074,384   .   Filing Date: February 12, 2002
Reply to Office Action Mailed on March 15, 2005

different regions with a second relationship indicia that is visually different from the first relationship indicia.

54.   (Previously Presented) The method of claim 53, further comprising enabling the capability to convert an unverified relationship to a verified relationship.

55.   (Currently Amended) The method of claim 48, wherein displaying on the display a-relationship-between-indicium comprises identifying common subject matter between a plurality of data elements.

56.   (Currently Amended) The method of claim 48, further comprising:
       displaying on the display a focus region defined by region indicia that includes only a single first indicium of the data element indicia as a focus indicium, wherein the regions are displayed on the display based on the focus region and the first indicium; and
       displaying on the display a plurality of relationships to other indicium relative to the first indicium.

57.   (Currently Amended) The method of claim 56, further comprising:
       receiving a selection indication representative of selection of a second indicium of the data element indicia as the focus indicium, wherein the second indicium is positioned in a first region with other data element indicia;
       reconfiguring the regions on the display based on the selection of the second indicium;
       replacing the first indicium with the second indicium in the focus region of the display; and
       displaying the relationships to the other indicium relative to the second indicium.

58.   (Currently Amended) The method of claim 56, wherein displaying a first indicium comprises displaying only the first indicium in a central region of the display that is defined by region indicia.

59.   (Currently Amended) In a computer comprising a display, a method for displaying data element indicia representative of a plurality of data elements that are interrelated by a plurality of relationships, the method comprising:

identifying a subject area and a corresponding plurality of interrelated data types;

categorizing a plurality of unassociated data elements to be included in at least one of the data types, wherein the data elements comprise at least one of a text file, a graphics file, or a video file or combinations thereof, and categorization is based on the content or subject matter included within each of the files,

wherein the data types describe the content or subject matter encompassed in the data elements to be categorized therein;

generating a focus region in a display that is defined by region indicia and includes a representation of only one of the data elements and a data type descriptive of the one of the data elements;

generating a plurality of associated regions in the display, wherein each of the associated regions is defined by region indicia and isare indicated in the display to be representative of one of the data types;

displaying in the display a representation of each of the data elements in at least one of the associated regions that correspond to the data type into which each of the data elements were categorized; and

indicating in the display a relationship only between individual data elements in different associated regions and not between data elements in the same regions.

60.   (Currently Amended) The method of claim 59, wherein identifying a subject area comprises, selecting the one of the data elements that is represented in the focus region from a group of representations of data elements displayed in one of the associated regions.

61.   (Previously Presented) The method of claim 59, wherein categorizing a plurality of data elements comprises scanning each of the data elements to determine a specific data type corresponding thereto.

62.   (Previously Presented) The method of claim 59, wherein displaying in the display a representation of each of the data elements comprises determining which of the associated regions each of the data elements are associated with.

63.   (Previously Presented) The method of claim 59, wherein displaying in the display a representation of each of the data elements comprises representing each of the data elements individually with a visually perceptible representation.

64.   (Previously Presented) The method of claim 59, wherein generating a focus region comprises providing a context by which the associated regions are generated and displayed.

65.   (Previously Presented) The method of claim 59, wherein generating a plurality of associated regions in the display comprises defining a pattern of visually perceptible panels, wherein each of the panels is an associated region.

66.   (Currently Amended) An apparatus for displaying data element indicia representative of a plurality of data elements interrelated by a plurality of relationships, the apparatus comprising:
a display;
a processor coupled to the display; and
a memory device, coupled to the processor, the memory device comprising:
instructions executable by the processor to display on the display a plurality of visibly separated regions, wherein each of the regions is defined by region indicia and is representative of one of a plurality of data types that are interrelated by a pre-defined subject area;

instructions executable by the processor to categorize a plurality of unassociated data elements to be included in the regions based on a data type associated with each of the data elements that is indicative of the content encompassed by the respective data elements;

instructions executable by the processor to display on the display a plurality of data element indicia that are positioned in the regions, wherein each indicium of the data element indicia is representative of a data element that is categorized to be displayed in the corresponding region, and wherein the data types are displayable in the respective regions to describe the content or subject matter of the data element categorized to be displayed therein; and

instructions executable by the processor to display on the display a relationship between only indicium of the data element indicia that are positioned in different regions.

67.   (Currently Amended) The apparatus of claim 66, further comprising a user input device coupled to the processor, and wherein the memory device further comprises instructions executable by the processor to receive, via the user input device, confirmation of a selected relationship between individual indicium that is represented as a potential relationship, wherein each of the individual indicia are representative of wholly unique, otherwise unassociated data elements; and

instructions executable by the processor to convert the selected relationship between the individual indicium to a relationship represented as a confirmed relationship.

68.   (Previously Presented) The apparatus of claim 66, wherein the regions define a visually perceptible grid pattern.

69.   (Currently Amended) The apparatus of claim 66, wherein the memory device further comprises:

instructions executable by the processor to display on the display a first region defined by region indicia that includes a single first indicium of the data element indicia as a focus indicium, wherein the regions are displayed based on the first indicium and wherein the first indicium was previously positioned in one of the regions; and

instructions executable by the processor to display on the display a plurality of relationships between other ~~indicium of the~~ data element indicia and the first indicium.

70.   (Currently Amended) The apparatus of claim 69, further comprising a user input device coupled to the processor, and wherein the memory device further comprises:

instructions executable by the processor to receive, via the user input device, a selection of a <u>single</u> second indicium of the data element indicia as the focus indicium;

instructions executable by the processor to reconfigure on the display the regions <u>and</u>~~based on~~ the second indicium <u>to be displayed in the first region</u>; and

instructions executable by the processor to display on the display the relationship indicia relative to the second indicium.

71.   (Previously Presented) The apparatus of claim 66, wherein the executable instructions form a part of a browser application stored in the memory device.

72.   (Withdrawn) An apparatus for displaying data element indicia representative of a plurality of data elements interrelated by a plurality of relationships, the apparatus comprising:

a display;

a processor coupled to the display; and

a memory device, coupled to the processor, the memory device comprising:

instructions executable by the processor to identify a selected focus data element;

instructions executable by the processor to retrieve a collection of data elements that are associated with the focus data element, wherein each of a plurality of data elements included in the collection of data elements are associated with one of a plurality of corresponding data types;

instructions executable by the processor to generate a focus region to be displayed in a display, wherein the focus region includes a representation of the focus data element;

Page 9 of 21

Serial No. 10/074,384   Filing Date: February 12, 2002
Reply to Office Action Mailed on March 15, 2005

instructions executable by the processor to generate a plurality of regions to be displayed in the display, wherein each of the regions is indicative of each of the data types represented within the collection of data elements; and

instructions executable by the processor to associate a representation of each of the data elements with one of the corresponding regions based on equivalency of one of the data types.

73. (Withdrawn) The apparatus of claim 72, wherein the memory device further comprises instructions executable by the processor to identify relationships between the data elements that are represented in different regions.

74. (Withdrawn) The apparatus of claim 73, wherein the memory device further comprises instructions executable by the processor to generate lines for display in the display that selectively connect the data elements to represent the relationships.

75. (Withdrawn) The apparatus of claim 72, wherein the memory device further comprises instructions executable by the processor to scan the collection of data elements to determine the data types that are represented within the collection of data elements.

76. (Withdrawn) The apparatus of claim 72, wherein the memory device further comprises a database and instructions executable by the processor to retrieve from the database a list of the data elements that are related to the focus data element.

77. (Withdrawn) The apparatus of claim 72, wherein the memory device further comprises a database and instructions executable by the processor to retrieve a displayable graphical representation of each of the data elements in the collection of data elements from the database.

78. (Withdrawn) The apparatus of claim 77, wherein the memory device further comprises instructions executable by the processor to create a displayable graphical representation of one of the data elements when a displayable graphical representation of the one of the data elements does not exist in the database.

Page 10 of 21

Serial No. 10/074,384   Filing Date: February 12, 2002
Reply to Office Action Mailed on March 15, 2005

79.   (Withdrawn) The apparatus of claim 72, wherein the memory device further comprises a database and instructions executable by the processor to retrieve a title for each of the data elements from the database.

80.   (Withdrawn) The apparatus of claim 72, wherein the memory device further comprises instructions executable by the processor to determine the regions based on the data types that are represented within the collection of data elements.

81.   (Withdrawn) The apparatus of claim 72, wherein the memory device further comprises instructions executable by the processor to visually identify each of the regions as representative of a data type.

82.   (New) The method of claim 48, wherein categorizing a plurality of unassociated data elements comprises selecting the associated data type from a plurality of data types that have been defined, organized and stored in a database.

83.   (New) The method of claim 82, wherein the data types have been defined, organized and stored in the database with a knowledge model.

84.   (New) The method of claim 48, wherein the data elements comprise at least one of a text file, a graphics file, or a video file or combinations thereof.

85.   (New) The method of claim 48, wherein categorizing a plurality of unassociated data elements comprises searching a database for one of the data elements or data element access information that is stored in the database.

86.   (New) The method of claim 59, wherein displaying in the display a representation of each of the data elements comprises retrieving a displayable graphical representation of each of the data elements from a database.

Page 11 of 21

Serial No. 10/074,384   Filing Date: February 12, 2002
Reply to Office Action Mailed on March 15, 2005

87.   (New) The method of claim 86, wherein displaying on the display a plurality of data elements comprises creating a displayable graphical representation of a data element when a displayable graphical representation of the data element does not exist in the database.

88.   (New) The method of claim 59, wherein displaying in the display a representation of each of the data elements comprises retrieving from a database a title to display in the display for each of the data elements.

89.   (New) The method of claim 59, wherein generating a plurality of associated regions comprises determining the regions based on the data types that are represented with the data elements.

90.   (New) The method of claim 59, wherein categorizing a plurality of unassociated data elements comprises organizing the data elements with a knowledge model by association with a data type.

91.   (New) The apparatus of claim 66, wherein each of the data elements are a uniquely identifiable digital object capable of manipulation and storage in the memory device by the processor.

92.   (New) The apparatus of claim 66, wherein the region indicia comprise a title indicative of the data type and a region borderline.